

ABSTRACT

A main power-supply circuit (11) and a secondary power-supply circuit (14) connected to an alternating current power supply AC are contained. The main power-supply circuit (11) contains a full-wave rectifier (D1) and an input current control circuit (12) generally corresponding to a harmonic current suppression circuit. The input current control circuit (12) contains a resistor (R1) as circuit current detection means and a control circuit (13) for controlling a switch element (Q1) by detecting a current flowing in the resistor (R1). Then, a connection is performed so that a current flowing in a diode as a second rectifying circuit of the secondary power-supply circuit (14) may return to the alternating current power supply through the resistor (R1).